

REMARKS

Claims 1-4 are pending in this application. By this Amendment, claim 1, the title and the Abstract are amended. No new matter is added. Reconsideration of this application is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representatives by Examiner Tugbang in the July 6, 2006 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. Objection to the Abstract

The Office Action objects to the Abstract for including more than 150 words. An amended Abstract is attached. The amended Abstract is less than 150 words. Withdrawal of the objection is respectfully requested.

II. §102 Rejection

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(e) over U.S. Patent No. 6,683,749 to Daby et al. ("Daby"). This rejection is respectfully traversed.

Independent claim 1 recites a method of manufacturing a thin-film magnetic head, that includes, among other features, forming a first magnetic pole layer, removing both sides in a track width direction of the first magnetic pole layer so as to leave a predetermined residual area in the first magnetic pole layer, forming an insulating layer about the residual area of the first magnetic pole layer, forming a gap layer made of a nonmagnetic material on the residual area of the first magnetic pole layer and the insulating layer, forming on the gap layer a second magnetic pole layer magnetically connected to the first magnetic pole, and patterning the second magnetic pole layer by etching while using a mask, so that a width of the second magnetic pole layer in the track width direction is smaller than that of the residual area.

Support for the feature emphasized above may be found throughout the original specification and drawings. For example, specific support may be found

at least at paragraphs [0054]-[0056] and Figs. 13-14 of the specification. As described at paragraph [0056], the insulating layer about the residual area of the first magnetic pole layer prevents the etching process from cutting into the magnetic material of the lower magnetic pole layer 10. In this manner, material from the lower magnetic pole layer 10 is prevented from adhering to the root of the first upper magnetic pole part 26a and its vicinity and obstructing, as described in paragraph [0006], the etching process used to reduce the width of the second magnetic pole layer in the track width direction.

Applicants respectfully assert that Daby does not teach or suggest such a combination of features, nor would such a combination of features have been obvious to one of ordinary skill in the art at the time the invention was made. For example, as described in Daby at col. 8, lines 37-44, the top pole 14 is etched to have a top pole width that is equal to the bottom pole upper portion width not smaller than, as recited in the claims.

Accordingly, it is respectfully submitted that claim 1 is patentably distinguishable over the applied art. Claim 2 depends from independent claim 1 and is likewise patentably distinguishable over the applied art for at least its dependence on an allowable base claim, as well as for additional features claim 2 recites. Accordingly, withdrawal of this rejection is respectfully requested.

III. §103 Rejections

A. The Office Action rejects claim 3 under 35 U.S.C. §103(a) as unpatentable over Daby in view of U.S. Patent No. 5,640,753 to Schultz et al. ("Schultz"). This rejection is respectfully traversed.

Claim 3 depends from claim 1. Schultz fails to overcome the above-described deficiency of Daby with respect to claim 1. Therefore, the asserted combination of Daby and Schultz does not teach or suggest the combinations of features recited in claim 1.

For at least these reasons, it is respectfully submitted that claim 3 is patentably distinguishable over the applied art for at least the reasons discussed above with respect to claim 1, as well as for additional features that claim 3 recites. Withdrawal of the rejection is respectfully requested.

B. The Office Action rejects claim 4 under 35 U.S.C. §103(a) as unpatentable over Daby in view of U.S. Patent No. 6,278,580 to Sasaki et al. ("Sasaki"). This rejection is respectfully traversed.

Claim 4 depends from claim 1. Sasaki fails to overcome the above-described deficiency of Daby with respect to claim 1. Therefore, the asserted combination of Daby and Sasaki does not teach or suggest the combinations of features recited in claim 1.

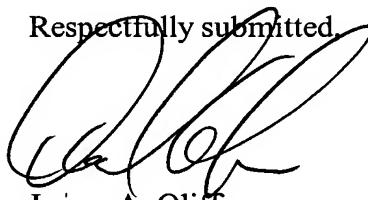
For at least these reasons, it is respectfully submitted that claim 4 is patentably distinguishable over the applied art for at least the reasons discussed above with respect to claim 1, as well as for additional features that claim 4 recites. Withdrawal of the rejection is respectfully requested.

IV. Conclusion

Applicants' representatives presented the above arguments to Examiner Tugbang during the July 6, 2006 interview. The Examiner agreed that the amended claims appear to overcome the rejections based upon the currently cited prior art references.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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JAO:DAT/JMH

Attachment:
Amended Abstract

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